SYSTEM AND METHO FOR SAP FM DEMODULATION

ABSTRACT OF THE DISCLOSURE

Certain embodiments of the present invention provides a system and method for SAP FM demodulation. The system includes a bandpass filter for isolating the SAP signal, a Hilbert filter to produce a copy of the SAP signal phase shifted by 90 degrees, an FM demodulator for demodulating the SAP signal using the phase shifted SAP signal and a delayed SAP signal, and a lowpass filter to eliminate noise from the FM demodulated SAP signal. The system may also include an automatic gain control for normalizing amplitude of FM demodulator input signals. The digital FM demodulator uses a simplified approximation using non-unity delay for simplified demodulation of frequency modulated signals.